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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/910,970	07/20/2001	David H. Hanes	10012397-1	2563

7590 03/20/2009

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EXAMINER	
ATALA, JAMIE JO	

ART UNIT	PAPER NUMBER
2621	

MAIL DATE	DELIVERY MODE
03/20/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/910,970	HANES, DAVID H.	
	Examiner	Art Unit	
	JAMIE JO VENT ATALA	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 May 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20 and 22-35* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20 and 22-35* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. The Examiner has specific knowledge of references (Kobayashi – US 5,765,053, Zabih et al - US 5,767,922, Mercier - US 6,865,747, and Lert et al – US 4,677,466) would render claims 1-20 and 22-35 unpatentable. The following Action is non-final due to the newly discovered references (Kobayashi – US 5,765,053, Zabih et al - US 5,767,922, Mercier - US 6,865,747, and Lert et al – US 4,677,466). Claims 21 and 36-40 were cancelled on April 30, 2004.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 1 and 6 are rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. Claims 1 and 6 are rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. Supreme Court precedent[1] and recent Federal Circuit decisions[2] indicate that a statutory "process" under 35 U.S.C. 101 must (1) be tied to another statutory category (such as a particular apparatus), or (2) transform underlying subject matter (such as an article or material) to a different state or thing. While the instant claim recites a series of steps or acts to be performed, the claim neither transforms underlying subject matter nor is positively tied

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[1] *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876).

[2] *In re Bilski*, 88 USPQ2d 1385 (Fed. Cir. 2008).

to another statutory category that accomplishes the claimed method steps, and therefore does not qualify as a statutory process. For example the **method for detecting the border of recorded video data** including steps of analyzing and identifying recited in claim 1 and receiving recited in claim 6 are of sufficient breadth that it would be reasonably interpreted as a series of steps completely performed mentally, verbally or without a machine. For instance the method recited in claims 1 and 6 can be performed by a person viewing (receiving) video from a camcorder and, after seeing the video stream, recognizing a blank portion.

4. Claim(s) 15-20 and 22-35 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claim 15-20 and 22, claims 23-28 and claims 29-35 recite an "application" or a "system" comprising modules and logic. According to the specification these modules and logic may be software (page 4, lines 8- 18). Therefore these claims are so broadly written as to encompass software, i.e. a computer program *per se*. A computer program *per se* is neither a process or a product (i.e., a tangible "thing") and therefore does not fall within one of the four statutory classes of § 101.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 6, 9,10,12,15, and 22 are rejected under 35 U.S.C.102 (b) as being anticipated by Kobayashi (US 5,765,053).

[claim 1]

In regard to Claim 1, Kobayashi discloses a method for detecting the border of recorded video data comprising:

- Analyzing a plurality of video frames, the plurality of video frames comprising recorded data content and unrecorded data content (Column 5 Lines 55- Column 6 Line 10);
- Identifying at least one frame of the unrecorded data content as a border of the recorded data content (Column 6 Lines 8-14 describe the system identifying blank portion of the video stream and the unrecorded portion (i.e. missing portion of the recording) and thereby determines the boundaries and borders between recorded and unrecorded content).

[claim 6]

In regard to Claim 6, Kobayashi discloses a method further comprising receiving at least a subset of the plurality of video frames from one of the group consisting of a video camcorder, video recorder and a digital data (Column 2 Lines 14-21; camcorder).

[claim 9]

In regard to Claim 9, Kobayashi discloses a method for detecting the border of recorded video data comprising:

- A video data source (Column 6 Lines 8-10)
- A border detection module is coupled to the input operable to:
    - Receive a plurality of video frames, the plurality of video frames comprising recorded data and unrecorded data content (Column 5 Lines 65 – Column 6 Lines 10);
    - Analyzing a plurality of video frames (Column 6 Lines 8-14)
    - Identifying at least one frame of the unrecorded data content as a border of the recorded data content (Column 6 Lines 8-14 describe the system identifying blank portion of the video stream and the unrecorded portion (i.e. missing portion of the recording) and thereby determines the boundaries and borders between recorded and unrecorded content).

[claim 10]

In regard to Claim 10, Kobayashi discloses a media storage system (camcorder – Column 2 Line 14) that clearly stores the received recorded data content based on the identified border, since the recorded data content is not stored in the black (border) unrecorded data portion (Column 2 Lines 13-17; Column 6 Lines 5-8).

[claim 12]

In regard to Claim 12, Kobayashi discloses a method further comprising receiving at least a subset of the plurality of video frames from one group of the group consisting of a video camcorder, video recorder and a digital data stream (Column 2 Lines 14-21; camcorder).

[claim 15]

In regard to Claim 15, Kobayashi discloses a method for detecting the border of recorded video data comprising:

- A border detection module (Column 6 Lines 8-14 and logic residing on the module) operable to:
    - Receive a plurality of video frames, the plurality of video frames comprising recorded data and unrecorded data content (Column 6 Lines 8-16 describes the video frames that are entered into the system being both recorded and unrecorded content);
    - Analyze the plurality of video frames (Column 6 Lines 8-16);
    - Identify at least one frame of the unrecorded data content as a border of the recorded data content (Column 6 Lines 5-16 and Column 4 Lines 1-16 describe the system identifying blank portion (i.e. blank portion) of the video stream and the unrecorded portion (i.e. missing portion of the recording) and thereby determines the boundaries and borders between recorded and unrecorded content).

[claim 22]

In regard to Claim 22, Kobayashi discloses a method further comprising receiving at least a subset of the plurality of video frames from one of the group consisting of a video camcorder, video recorder and a digital data stream (Column 2 Lines 14-21; camcorder).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi (US 5,765,053).

Kobayashi discloses all the claimed limitations as discussed in claim 15 above except for providing wherein the logic residing on module comprises firmware.

It is noted that using firmware instead of software is old and well known in the art and; therefore, Official Notice is taken.

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the well-known firmware into Kobayashi's system in order to process digital data more efficiently.

9. Claims 2-4, 7, 13, 16, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi (US 5,765,053) in view of Zabih et al (US 5,767,922).

[claim 2]

In regard to Claim 2, Kobayashi discloses a method of detecting unrecorded and recorded video data; however, fails to disclose a method for further digitizing at least a subset of the plurality of video frames. It is taught by Zabih et al through a system of detecting breaks in video frames and converting the A/V information into digital data (Figure 3 and described in Column 6 Lines 34-47). The converting to a digital format

provides the system the ability to provide a more variety of compression techniques to allow for further analyzing of the A/V information (Column 2 Lines 4-23). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the detecting of unrecorded and recorded video data, as disclosed by Kobayashi, and further teach the system to digitize the video data, as taught by Zabih, to allow for a more efficient analysis of the data.

[claim 3]

In regard to Claim 3, Kobayashi discloses a method of detecting unrecorded and recorded video data; however, fails to disclose a method of compressing at least a subset of digitized plurality of video frames. It is taught by Zabih et al to provide compression methods to the video data (Column 1 Lines 45-67) to allow for identification of scene breaks with more efficiency due to the video compression techniques being applied (Column 1 Lines 53-54). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the detecting of unrecorded and recorded video data, as disclosed by Kobayashi, and further teach the system to use compression of the digitized video frames, as taught by Zabih et al, to provide a more efficient method of detecting borders within the video data.

[claim 4]

In regard to Claim 4, Kobayashi discloses a method of detecting unrecorded and recorded video data; however, fails to disclose a method of formatting at least a subset of digitized plurality of video frames. Zabih et al teaches the use of formatting the video data (Column 1 Lines 45-55, MPEG) to compress the A/V information. Therefore, it

would have been obvious to one of ordinary skill in the art at the time of the invention to use the detecting of unrecorded and recorded video data, as disclosed by Kobayashi, and further teach the system formatting of the digitized video frames, as taught by Zabih et al, to provide a compatible format with many existing video processing and production systems.

[claim 7]

In regard to Claim 7, Kobayashi discloses a method of detecting unrecorded and recorded video data; however, fails to disclose creating a histogram of at least one of the plurality of video frames and determining from the histogram that at least one frame of unrecorded data content. Zabih et al teaches the use of histogram to determine scene changes and unrecorded data content between the scenes changes (Figure 14, 17, 19 shows the histogram process and is described in Column 12 Lines 60+ through Column 13 Lines 1-7). The use of histograms allows for the detection of cuts in the video and thereby provides an effective method of analyzing scene changes (Column 2 Lines 30-40). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the detecting of unrecorded and recorded video data, as disclosed by Kobayashi, and further teach the system to use histogram analysis for detection of unrecorded data, as taught by Zabih et al, to allow the system an efficient method of detecting the content.

[claim 13]

In regard to Claim 13, Kobayashi discloses a method of detecting unrecorded and recorded video data; however, fails to disclose creating a histogram of at least one of

the plurality of video frames and determining from the histogram that at least one frame of unrecorded data content. Zabih et al teaches the use of histogram to determine scene changes and unrecorded data content between the scenes changes (Figure 14, 17, 19 shows the histogram process and is described in Column 12 Lines 60+ through Column 13 Lines 1-7). The use of histograms allows for the detection of cuts in the video and thereby provides an effective method of analyzing scene changes (Column 2 Lines 30-40). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the detecting of unrecorded and recorded video data, as disclosed by Kobayashi, and further teach the system to use histogram analysis for detection of unrecorded data, as taught by Zabih et al, to allow the system an efficient method of detecting the content.

[claim 16]

In regard to Claim 16, Kobayashi discloses all the claimed limitations as discussed in claim 15 above except for providing the claimed wherein the logic residing on the module comprises at least one software application.

Zabih et al teaches a system wherein border detection is performed by digitizing video (Column 6, Lines 34-47) and using a computer operating with codes (col. 16, lines 21-29) to properly provide evaluation of the video data.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method for detecting the border of recorded video data, as disclosed by Kobayashi, and further digitize the video and incorporate logic code

that resides on the module, as taught by Zabih, to provide a faster and more flexible way of determining of the borders of video content.

[claim 18]

In regard to Claim 18, Kobayashi discloses a method of detecting unrecorded and recorded video data; however, fails to disclose creating a histogram of at least one of the plurality of video frames and determining from the histogram that at least one frame of unrecorded data content. Zabih et al teaches the use of histogram to determine scene changes and unrecorded data content between the scenes changes (Figure 14, 17, 19 shows the histogram process and is described in Column 12 Lines 60+ through Column 13 Lines 1-7). The use of histograms allows for the detection of cuts in the video and thereby provides an effective method of analyzing scene changes (Column 2 Lines 30-40). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the detecting of unrecorded and recorded video data, as disclosed by Kobayashi, and further teach the system to use histogram analysis for detection of unrecorded data, as taught by Zabih et al, to allow the system an efficient method of detecting the content.

10. Claims 5, 8,11,14,19,20,29,31,32,33,34, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi (US 5,765,053) in further view of Mercier et al (US 6,865,747).

[claim 5]

In regard to Claim 5, Kobayashi, discloses storing the recorded data content using a media storage system (camcorder - Column 2 line 14). Storing of the recorded data is clearly based on the identified border since the recorded data content is not stored in the black (border) unrecorded data portion (Column 2 Lines 13-17; Column 6 Lines 5-8). However, Kobayashi fails to disclose storing the recorded data content on an optical storage media, using instead a VCR. Mercier et al teaches storing video content on a DVD (Column 4 Lines 4-5). It is well known in the art that optical storage media provide larger storage capacity and higher resolution recording than VCRs. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to record the recorded data content onto an optical disc, as taught by Mercier et al, to provide an effective manner of storing the data.

[claim 8]

In regard to Claim 8, Kobayashi discloses a method of detecting unrecorded and recorded video data; however, fails to disclose analyzing motion vectors created from at least one of the plurality of video frames, and determining from the motion vectors at least one frame of unrecorded content. Mercier teaches a system wherein an empty frame has null motion vectors (Column 10 Lines 1-35). As the system reads out information from memory and compares it to the motion vector it is determined the output signal based on frame detection and if empty unrecorded frame is present the motion vector will be null. The use of motion vectors detecting information between the present picture and outputted data allows for quality picture analysis of the video

content. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the detecting of unrecorded and recorded data, as disclosed by Kobayashi and teach a system to analyze the incoming data based on motion vectors, as taught by Mercier, in order to allow for effective analysis of the data stream.

[claim 11]

In regard to Claim 11, see Examiner's remarks regarding claim 5.

[claim 14]

In regard to Claim 14, Kobayashi discloses a method of detecting unrecorded and recorded video data; however, fails to disclose analyzing motion vectors created from at least one of the plurality of video frames, and determining from the motion vectors at least one frame of unrecorded content. Mercier teaches a system wherein an empty frame has null motion vectors (Column 10 Lines 1-35). As the system reads out information from memory and compares it to the motion vector it is determined the output signal based on frame detection. The use of motion vectors detecting information between the present picture and outputted data allows for quality picture analysis of the video content. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the detecting of unrecorded and recorded data, as disclosed by Kobayashi, and teach a system to analyze the incoming data based on motion vectors, as taught by Mercier, in order to allow for effective analysis of the data stream.

[claim 19]

In regard to Claim 19, see Examiner's remarks regarding Claim 5.

[claim 20]

In regard to Claim 20, Kobayashi discloses a method of detecting unrecorded and recorded video data; however, fails to disclose analyzing motion vectors created from at least one of the plurality of video frames, and determining from the motion vectors at least one frame of unrecorded content. Mercier et al teaches a system wherein motion vector detection circuit detects motion vectors between a present pictures and empty frames making the motion vector null (Column 10 Lines 1-35). As the system reads out information from memory and compares it to the motion vector it is determined the output signal based on frame detection. The use of motion vectors detecting information between the present picture and outputted data allows for quality picture analysis of the video content. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the detecting of unrecorded and recorded data, as disclosed by Kobayashi, and teach a system to analyze the incoming data based on motion vectors, as taught by Mercier in order to allow for effective quality pictures analysis of the data stream.

[claim 29]

In regard to Claim 29, Kobayashi discloses a method for detecting the border of recorded video data comprising:

- A border detection module operable to:

- Receive a plurality of video frames, the plurality of video frames comprising recorded data and unrecorded data content (Column 6 Lines 8-16 describes the video frames that are entered into the system being both recorded and unrecorded content) and logic residing on the module, the logic adapted to compare at least two video frames of video data, the logic adapted to identify at least two video frames as a border between unrecorded data content of the video data and recorded data content of the video data; however, fails to disclose if an amount of motion in one of the at least two video frames exceeds a predetermined threshold relative to another one of the least two video frames.

Mercier teaches a system wherein the video frames are compared for recorded or unrecorded/empty frames. The comparison of the frames determines if motion exceeds a threshold. If the frame is empty the threshold has null motion vectors (Column 10 Lines 1-35). As the system reads out information from memory and compares it to the motion vector it is determined the output signal based on frame detection and if empty unrecorded frame is present the motion vector will be null. The use of motion vectors detecting information between the present picture and outputted data allows for quality picture analysis of the video content. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the detecting of unrecorded and recorded data, as disclosed by Kobayashi, and teach a system to analyze the incoming data based on motion vectors, as taught by Mercier, in order to allow for effective analysis of the data stream.

[claim 31]

In regard to Claim 31, Kobayashi, discloses initiating recording of the recorded data content into a media storage system based on the border video frame (See Column 6 Lines 9-10 where data is recorded on the border frame).

[claim 32]

In regard to Claim 32, it is inherent in Kobayashi that the recorded data content corresponds to the type of media storage system being used. Otherwise the data would not be recorded on that medium

[claim 33]

In regard Claim 33, Kobayashi compares the two video frames in real time during an automatic searching operation of a reproducing operation (Column 6 Lines 11-14).

[claim 34]

In regard to Claim 34, Kobayashi discloses a method of detecting unrecorded and recorded video data; however, fails to disclose wherein the video data comprises compressed video data. It is taught by Mercier et al to provide compression methods to the video data (Column 10 Lines 1-67) to allow for identification of scene breaks with more efficiency due to the video compression techniques being applied (Column 10 Lines 1-67). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the detecting of unrecorded and recorded video data, as

disclosed by Kobayashi, and further teach the system to use compression of the digitized video frames, as taught by Mercier et al, to provide a more efficient method of detecting borders within the video data.

[claim 35]

In regard to Claim 35, Kobayashi in view of Mercier discloses a method further comprising receiving at least a subset of the plurality of video frames from one of the group consisting of a video camcorder, video recorder, and digital data stream (Column 2 Lines 14-21 of Kobayashi, camcorder).

11. Claim 23,24,25,26, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi (US 5,765,053) in view of Lert et al (US 4,677,466)

[claim 23]

In regard to Claim 23, Kobayashi discloses a method for detecting the border of recorded video data comprising:

- A border detection module operable to:
    - Receive a plurality of video frames, the plurality of video frames comprising recorded data and unrecorded data content (Column 6 Lines 8-16 describes the video frames that are entered into the system being both recorded and unrecorded content) and logic residing on the module, the logic adapted to compare at least two frames of the video data, the

logic adapted to identify at least one of the two video frames as border between unrecorded data content and recorded data content of the video data; however, fails to disclose if pixel values of at least one of the two video frames corresponds to a particular color.

Lert et al teaches a system wherein determines and monitors the broadcast stream based on the color change between successive frames or portions and thereby determines unrecorded/blank frames (Column 7 Lines 5-38). It is taught by Lert et al to determine program identification to identify and monitor occurrences of predetermined events/unrecorded data (Column 2 Lines 30+). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method for detecting the border of recorded video data, as disclosed by Kobayashi, and further incorporate determining recorded and unrecorded data based on video frames corresponding to a particular color, as taught by Lert et al, in order to provide a effective measuring and determining of the borders of video content.

[claim 24]

In regard to Claim 24, see Examiner's remarks regarding Claim 31.

[claim 25]

In regard to Claim 25, see Examiner's comments regarding Claim 32.

[claim 26]

In regard Claim 26, see Examiner's comments regarding Claim, 33.

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[claim 27]

In regard to Claim 27, Kobayashi in view of Lert et al discloses a method further comprising receiving at least a subset of the plurality of video frames from one of the group consisting of a video camcorder and video recorder and a digital data stream (Column 2 Lines 14-21)

12. Claim 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi (US 5,765,053) in view of Lert et al (US 4,677,466) and further in view of Zabih et al (US 5,767,922).

[claim 28]

In regard to Claim 28, Kobayashi in view of Lert et al, discloses a method of detecting unrecorded and recorded video data; however, fails to disclose wherein the logic is adapted to create at least one histogram for comparing the at least two video frames. Zabih et al teaches the use of histogram to determine scene changes and unrecorded data content between the scenes changes (Figure 14, 17, 19 shows the histogram process and is described in Column 12 Lines 60+ through Column 13 Lines 1-7). The use of histograms allows for the detection of cuts in the video and thereby provides an effective method of analyzing scene changes (Column 2 Lines 30-40). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the detecting of unrecorded and recorded video data, as disclosed by Kobayashi in

view of Lert et al, and further to use histogram analysis for detection of unrecorded data, as taught by Zabih et al. to provide an additional way to detect the content..

13. Claims 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi (US 5,765,053) in view of Mercier (US 6,865,747) and further in view of Zabih et al (US 5,767,922).

[claim 30]

In regard to Claim 30, the combination of Kobayashi and Mercier discloses all the claimed limitations as discussed in claim 29 above except for providing the claimed wherein the logic is adapted to analyze motion compensation vectors to determine the amount of motion.

Zabih et al teaches an encoder which performs motion-compensation prediction wherein the presence of a scene change is detected by comparing the variance of values of pixels in some predetermined areas of a past image wit the variance of values of pixels in some predetermined areas of a currently processed image (see col. 3, lines 44-50).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the encoder performing motion-compensation prediction as taught by Zabih et al into the system of Kobayashi as modified by Mercier in order to allow for effective analysis of the data stream.

Conclusion

14. The prior are made of record and not relied upon is considered pertinent to applicant's disclosure.

- Boles et al (US 5,019,899) an electronic data and encoding with a recognition system is of significant interest.
- Choi et al (US 5,282,097) system and method for automatic search for record and play system.
- Dimitrova et al (US 6,100,941) system for determining commercial location.

Contact Fax Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMIE JO VENT ATALA whose telephone number is (571)272-7384. The examiner can normally be reached on 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JAMIE JO VENT ATALA/
Examiner, Art Unit 2621

/Thai Tran/
Supervisory Patent Examiner, Art Unit 2621

/Wanda L Walker/
Director, Technology Center 2600